REMARKS

Claims 1-10, 12-18, and 20-26 are pending in this application.

Claims 1, 20, 23, and 24 stand rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Pub. No. 2003/101451 to Bae.

Independent claim 1 is directed to a method for authenticating a recording medium, comprising the steps of: "acquiring, from the recording medium, a first set of a first type of unique data that is recorded on an information track on the recording medium in accordance with a predetermined rule; acquiring, from the recording medium, a second set of the first type of unique data that is recorded on the recording medium in accordance with the predetermined rule; and authenticating the recording medium based on a comparison of the first and second sets of unique data acquired in the data acquisition steps." Claim 23 depends from claim 1.

Independent claim 20 is directed to a computer readable recording medium storing a computer program for causing a computer to perform an instruction for authenticating a recording medium, the instruction comprising the steps of: "acquiring, from the recording medium, a first set of a first type of unique data that is recorded on an information track on the recording medium in accordance with a predetermined rule; acquiring, from the recording medium, a second set of the first type of unique data that is recorded on the recording medium in accordance with the predetermined rule; and authenticating the recording medium based on a comparison of the first and second sets of unique data acquired in the data acquisition steps." Claim 24 depends from claim 20.

As can be seen, though they are different in scope, each of claims 1 and 20 recites steps of acquiring, from a recording medium, first and second sets of a first type of unique data each recorded in accordance with the same predetermined rule; and a step of authenticating the recording medium based on a comparison of the first and second sets of the first type of unique data. The Office Action cites Bae's Figure 2 as disclosing these recited features. Office Action, March 13, 2008, page 3. Bae's Figure 2 is a flowchart referencing a comparison of "authentication information" and "intentional error information." There is no indication within Bae that the authentication information and intentional error information are the same type of unique data, as recited by claims 1 and 20. Further, there is no indication within Bae that the authentication information and intentional error information are recorded in accordance with the same predetermined rule, as recited by claims 1 and 20. In fact, as the intentional error information is generated by methods such as scratching, eroding, coating, perforating and applying stickers (see Bae, para. 19), the intentional error information is clearly not imparted in accordance with any predetermined rule, e.g., in accordance with a CD-R standard. Even more apparent, the intentional error information is not written in accordance with the same predetermined rule as the authentication information. Therefore, the intentional error information and authentication information cannot teach the recited first and second sets of the first type of unique data, which are recorded in accordance with the same predetermined rule.

In addition, in contrast to the comparison of the first and second sets of the first type of unique data, as recited by claims 1 and 20, Bae does not compare the authentication information and intentional error information. Rather, Bae arbitrarily imparts the intentional error information, e.g., a scratch, to portions of the optical recording medium, determines which portions are consequently unreadable (e.g., see addresses 0004-0007 of

Table 1), and then specifies the unreadable portions as authentication information on the optical recording medium. Before the optical recording medium is reproduced or recorded by an optical recording device, a comparison of the addresses of the unreadable portions (as determined by the device) and the addresses specified as authentication information is made to authenticate the optical recording medium. According to Bae, it would be "impossible" for a pirate copy to place intentional error information, e.g., to a place a scratch (which is not transferred via recording from the original to the pirate copy) at the exact positions specified by the authentication information (which is transferred via recording from the original to the pirate copy). In other words, the pirate copies cannot match the actual position of the intentional error information to the positions specified by the transferred authentication information. See Bae, para. 26.

Therefore, as can be seen, Bae is not teaching a comparison of the intentional error information and authentication information. Rather, Bae is teaching a comparison of the actual position of the intentional error information (e.g., at locations 0004-0007) to the written indication of those positions (e.g., bytes representing positions "0004" to "0007") by the authentication information. Thus, even assuming *arguendo* that the intentional error information and authentication information of Bae could meet the limitations of the first and second sets of a first type of unique data, as recited by claims 1 and 20 (not admitted), Bae still would not teach a comparison of the intentional error information and authentication information, as further required by claims 1 and 20.

Finally, it should be noted that Bae is relying on the read-out performance of the optical recording device to make the authentication determination because, more particularly, Bae is relying on the capability of the device to accurately and consistently determine the position of the intentional error information. In Bae, because the intentional

error information is imparted to the medium by way of scratching, eroding, and the like, there is little assurance that a an optical recording device would be able to determine the position of the intentional error information with consistent results. For example, as CDR devices are not designed to read scratches (which do not have lead-in information), there is little assurance that a CDR device could consistently determine where the intentional error information begins in the recording medium. On the other hand, the claimed invention achieves consistency and reliability by reproducing and comparing sets of the same type of data recorded in accordance with the same predetermined rule.

Accordingly, in view of the above distinctions over Bae, Applicants respectfully request that this rejection be withdrawn. If this rejection is not withdrawn, Applicants respectfully request the Examiner to cite (e.g., in an Advisory Action) a teaching of Bae meeting the recited "predetermined rule" of claims 1 and 20. and meeting the recited comparison of two sets of the same type of unique data.

Claims 2-5 and 9-10 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bae in view of U.S. Patent No. 6,073,189 to Bounsall. This rejection is respectfully traversed.

Claim 2-5, 9, and 10 depend from claim 1. As Bounsall does not cure (nor is cited as addressing) the above-noted deficiency of Bae, Applicants respectfully submit that claims 2-5, 9, and 10 distinguish over Bae and Bounsall in view of their dependence upon claim 1.

In addition, Applicants submit that Bae and Bounsall do not teach the further limitations of claim 2. As noted, claim 1 recites steps of acquiring, from a recording medium, first and second sets of a first type of unique data each recorded in accordance with the same predetermined rule; and a step of authenticating the recording medium

based on a comparison of the acquired first and second sets of the first type of unique data. Claim 2 further recites that the predetermined rule assigns respective values to the first and second sets of the first type of unique data, and that the values are based on respective, different types of recording methods used to record the first and second sets of the first type of unique data.

The Office Action cites Bae as disclosing a comparison of first and second sets of data (citing Figure 2); and cites Bounsall as disclosing first and second sets of data recorded by different types of recording methods (citing col. 1, lines 20-65; and col. 2, lines 28-35). One skilled in the art would not combine these features of Bae and Bounsall in the manner proposed by the Office Action. As noted, the cited portion of Bae discloses authentication information and intentional error information. The cited portion of Bounsall discloses different types of recording methods, which are namely incremental techniques including track at once and packet recording (fixed packet (FP) or variable packet (VP) recording). There is no teaching within Bae or Bounsall to suggest that the intentional error information of Bae could be recorded by such recording methods. Further, if Bounsall's recording methods were used to record the intentional error information and authentication information in the original optical recording medium, then the intentional error information and its exact position may be transferred to the pirate copy. As a result, in contrast to Bae's teachings, the positions of the intentional error information in the pirate copy would match the positions specified by the authentication information in the pirate copy, i.e., would thereby authenticate the pirate copy.

Accordingly, in view of the above distinction over Bae and Bounsall, Applicants respectfully request that this rejection be withdrawn. If this rejection is not withdrawn, Applicants respectfully request the Examiner to cite evidence as to how and why one

skilled in the art would use the different recording methods of Bounsall to concurrently record the intentional error region 122 and authentic data region 120 of Bae; and, further, how the intentional error region 122 and authentic data region 120 would be compared under the teachings of Bae (e.g., see step S50 of Figure 2) if recorded by such different methods of Bounsall.

Claims 6-8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bae in view of U.S. Patent No. 6,917,574 to Kawashima. Claims 6-8 depend from claim 1. As Kawashima does not address (nor is cited as addressing) the above deficiencies of Bae, Applicants respectfully request that this rejection be withdrawn.

Claims 12-17 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bae in view of Bounsall and Kawashima. Claims 12-17 depend from claim 1. As neither Bounsall nor Kawashima address the above deficiencies of Bae, Applicants respectfully request that this rejection be withdrawn.

Claims 21, 22, 25, and 26 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Bae in view of U.S. Patent No. 5,745,459 to Inokuchi. This rejection is respectfully traversed.

Claim 21 is directed to a computer readable recording medium, comprising "a read-only memory area and a read and write memory area, and storing, on the read and write area, a computer program for causing a computer to perform an instruction for authenticating a recording medium, the instruction comprising the steps of: acquiring, from the recording medium, a first set of a first type of unique data that is recorded on an information track on the recording medium in accordance with a predetermined rule; acquiring, from the recording medium, a second set of the first type of unique data that is

recorded on an information track on the recording medium in accordance with the predetermined rule; and authenticating the recording medium based on a comparison of the first and second sets of unique data acquired in the data acquisition steps." Claim 25 depends from claim 21.

Claim 22 is directed to an optical disk drive system, comprising: "a memory storing a program; and a processor configured to execute the program stored in the memory, wherein the program includes an instruction for authenticating a recording medium, the instruction comprising the steps of: acquiring, from the recording medium, a first set of a first type of unique data that is recorded on an information track on the recording medium in accordance with a predetermined rule; acquiring, from the recording medium, a second set of the first type of unique data that is recorded on an information track on the recording medium in accordance with the predetermined rule; and authenticating the recording medium based on a comparison of the first and second sets of unique data acquired in the data acquisition step." Claim 26 depends from claim 22.

As can be seen, though they are different in scope, each of claims 21 and 22 recites the steps of acquiring, from a recording medium, first and second sets of a first type of unique data each recorded in accordance with the same predetermined rule; and a step of authenticating the recording medium based on a comparison of the first and second sets of the first type of unique data. For the reasons stated above with respect to claims 1 and 20, Bae does not teach these features. Inokuchi does not address (nor is cited as addressing) these deficiencies of Bae. Accordingly, Applicants respectfully request that this rejection be withdrawn.

Claim 18 stands rejected under 35 U.S.C. 103(a) as being unpatentable over Bae in view of Bounsall, Kawashima, and U.S. Patent No. 7,027,717 to Tsujii. Claim 18 depends

from claim 1. As neither Bounsall, Kawashima, nor Tsujii addresses the above deficiencies of Bae, Applicants respectfully request that this rejection be withdrawn.

As all outstanding issues are addressed by this response to the outstanding Office Action, favorable reconsideration and allowance are solicited. If, however, there are remaining issues which can be addressed by a discussion with Applicant's representative, the Examiner is respectfully requested to contact the undersigned attorney, Steven Dickey, at (202) 420-4756. Further, if there are any additional charges in connection with this filing, the Examiner is respectfully requested and authorized to charge Deposit Account No. 04-1073 therefor.

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Respectfully submitted,

By _____

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